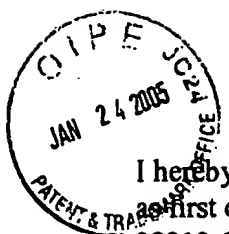


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Air Force Invention No. AFB00500

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On 14 January 2005
DATE OF DEPOSIT

Thomas C. Stover 22,531
NAME OF APPLICANT, ASSIGNEE, OR REG. REP.

TC Stover 14 January 2005
SIGNATURE DATE

entered
3/22/05
amm

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
Mark Ahmadjian et al
Serial No. 09/862,788
Filed: 18 May 2001
For: **PLUME DETECTOR**

Group Art Unit: 2876
Examiner: A. Kim

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

Supplemental Response After Final Under 37 CFR 1.116

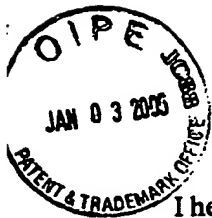
This response supplements applicants' response dated 12-30-04.

The above Office Action rejection of claims 1-5, 7-9, 11 & 13-16, as obvious under 35 USC 103 (a) over Hill, Jr. et al. ('285) herein Hill, in view of Hertel et al. ('531), herein "Hertel" is again respectfully traversed.

The Hertel patent is cited to add a lock-in amplifier to the teachings of Hill in a 103 (a) rejection of applicants' listed above claims by the above Office Action.

However, the Hertel patent is believed not effective against applicants' above claims under 37 CFR 1.131 and 715 of the MPEP. This is because applicants have submitted herewith a

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Air Force Invention No. AFB00500

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Of

On 30 December 2004
(DATE OF DEPOSIT)

Thomas C. Stover 22,531
NAME OF APPLICANT, ASSIGNEE, OR REG. REP.

Thomas C. Stover 30 December 2004
SIGNATURE DATE

*entered
3/23/05
anr*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
Mark Ahmadjian et al
Serial No. 09/862,788
Filed: 18 May 2001
For: **PLUME DETECTOR**

Group Art Unit: 2876
Examiner: A. Kim

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Sir:

Response After Final Under 37 CFR 1.116

In response to the Office Action dated 11-02-04, finally rejecting claims 1-16, in the above identified application, is requested that the rejection of these claims be reconsidered in light of the following Response.



Air Force Invention No. AFB005000

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On 20 March 2003
(DATE OF DEPOSIT)

Thomas C. Stover 22,531
NAME OF APPLICANT, ASSIGNEE, OR REG. REP.

Thomas C. Stover
SIGNATURE

20 March 2003
DATE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
Mark Ahmadjian et al
Serial No. 09/862,788
Filed: 18 May 2001
For: **PLUME DETECTOR**

Group Art Unit: 2876
Examiner: A. Kim

Honorable Commissioner for Patents
Washington D. C. 20231

Sir:

Amendment After Final Under 37 CFR 1.116

In response to the office action dated 21 January 2003, finally rejecting claims 1 -
- 15, in the above application, it is requested that the following amendment be entered
since it may place the application in condition for Allowance or in better form for
Appeal. Accordingly, please amend the application as follows:

IN THE CLAIMS

Amend the following claims per the clean copy shown below, as subsequently
explained by a marked-up version attached as Exhibit A.